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ABSTRACT

Students failing to master minimum competency tests are categorized as dropouts in this description of the results of and remediation efforts for the statewide Texas Educational Assessment of Minimum Skills (TEAMS) Testing Program. TEAMS assesses minimum competency in basic skills at grades 1, 3, 5, 7, 9 and 11-12 exit level. The first administration tested all eleventh graders (n=191,556) in October 1985. Based on mastery of 70 percent of curricula objectives the required mastery level was to correctly answer 36 of 72 math items and 45 of 72 English language items. While 88 percent and 91 percent of students mastered the math and English portions respectively, 22,485 individuals failed in mathematics and 16,921 failed in English. Among students at risk, 11,751 eligible eleventh graders did not take the October tests. Prevention programs generally focused on basic skills remediation. Tenth graders, identified by previous test scores, were given individual achievement profiles and encouraged to attend a six-week summer program. Community programs, media coverage and tutorial classes prepared students for the TEAMS. Districtwide efforts helped to keep a low failure rate. Future studies will identify remediation effects. (PN)

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A New Kind of Dropout: The Effect of Minimum Competency Testing on High School Graduation in Texas

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Minimum Competency Requirements for High School Graduation

As part of an effort to upgrade educational standards, the mastery of minimum competency tests has become a prerequisite for a high school diploma in many school districts and states. While there is disagreement concerning the appropriateness of this requirement, it is a fact that students are failing to graduate as a result of such tests. These students constitute a new group of high school dropouts.

The Minimum Competency Test (MCT) movement began in the late 1970s in an effort to reverse what educators saw as a decline in the quality of instruction in the nation's schools. Even by 1983, when the National Commission on Excellence in Education published "A Nation at Risk: The Imperative for Educational Reform," many states had already begun some type of state testing program. These testing programs established standards for minimum levels of proficiency. Based on test scores, students were retained, promoted or placed in remedial classes.

In the area of student achievement, the commission recommended that teacher-assigned grades be reflective of actual academic growth rather than mere indicators of effort and that students not be promoted to another grade unless they were actually able to perform the work. A second achievement recommendation was the use of standardized tests at major points in the educational process, in particular, at the time of graduation. These recommendations fueled the reform fire that was burning throughout the United States, and within two

years after the Commission's report, the majority of states in the union had passed minimum graduation requirements.

Most "exit level" testing programs require the student to make a certain score in reading, mathematics, and writing. He is given multiple opportunities to take the test, and he is provided remediation and tutoring to help him pass the tests. The potential positive aspects of raising standards for student achievement were discussed by McDill, Natriello and Pallas (1985): "Several different lines of research...give some hope that raising standards will lead students to work somewhat harder, at least when the standards are originally quite low, and that greater student effort will lead to somewhat greater student achievement." These positive aspects appear to be true for some low-achieving students; however, they may not affect the student who is already at risk of leaving school.

The potential negative effects of raising standards were also outlined by McDill, Natriello, and Pallas (1985): "If academic standards are raised and students are not provided substantial additional help to attain them, we predict that socially and academically disadvantaged students will be more likely to experience frustration and failure, resulting in notable increases in absenteeism, truancy, school-related behavior problems, and dropping out..." Adherence to rigid graduation requirements may well frustrate some borderline students into quitting school.

The educational community is divided on the issue of MCT. Though it is difficult to measure the exact impact, it is apparent that higher standards will cause some students to be denied a high school diploma. Is this denial the natural price of the push for excellence? Is this an appropriate use of standardized testing? There have been arguments that a test alone should not be the sole determinant of student promotion or graduation because standards are judgmental and no test can be absolutely reliable and valid (Linn, Madaus, and Pedulla, 1982). Some educators maintain that our educational system is based on individual differences and students who work to their capacity should receive a reward even if they are unable to meet a minimum standard (Palardy, 1984). On the other hand, the possibility of the denial of a diploma forces students and teachers to work harder in the basic skills and emphasizes the national commitment to excellence in education (Draba and Henderson, 1983).

Despite the arguments of educators, the MCT movement appears to be a national reality, and the students who fail to receive a diploma because of the new guidelines can be categorized as dropouts. It becomes the task of researchers to determine the impact of this movement on student retention and to recommend programs for intervention. Studies regarding this new group of dropouts will involve the same techniques and the same problems found in other work involving dropouts.

Dropouts

When one hears the term "dropout," there is a general understanding of what is meant — a dropout is a person who does not continue his education to the point of receiving a diploma. The surface simplicity of the term belies the difficulty that researchers and school district personnel have in defining "dropout" for purposes of record-keeping, statistical studies and the planning of intervention strategies.

There are as many definitions of "dropout" as there are school districts reporting dropout rates. Are students who leave school to join the military or to enter business school to be listed as dropouts? What about students who are over the compulsory age and leave school to raise a family or get a job? Any effort to standardize dropout categories has been less than successful, especially on a state and nationwide basis.

A major factor in the lack of data concerning dropouts is that many students leave school without reporting to school authorities that they are doing so. The school cannot maintain accurate records on students who are not there or who fail to return from the summer break (LeCompte and Goebel, 1985). The effort to identify the new dropouts, students who fail to graduate because of MCT guidelines, will be hampered by the reporting problems that have always existed in this area of study.

The most common reasons given for students' dropping out are poor grades, poor attendance, family problems and alienation from society. These students are generally from low socioeconomic backgrounds and are members of ethnic minority groups. In some states there are many students who do not speak English. Language minority youth are far more likely to leave school than other students the same age (Steinberg, Blinde and Chan, 1984).

The stereotypical dropout is likely to have had academic problems beginning early in elementary school. Generally he is thought to be aimless, uninvolved in school activities, and unsure as to what he will do when he leaves school. This description is very broad and not appropriate to all dropouts, but it represents the type of student most addressed in intervention strategies.

The effect of the MCT movement on students who have already suffered failure in the educational system may be adverse because it places higher academic demands on students who are already at risk of dropping out. However, according to Jaegar (1982), "In predicting the consequences of competency testing for students and teachers, we must be content for the moment with speculation rather than evidence." Speculation seems to lead to the conclusion that students will leave school as a result of failure to attain required higher standards. Not only will it be as difficult to identify the exact cause of a student's leaving school as it has been in the past, but it will be even more difficult to determine which students would have

dropped out regardless of MCT requirements and which ones became dropouts specifically because of their failure to pass competency tests.

The Texas Educational Assessment of Minimum Skills

In 1984, the Texas legislature passed House Bill 72 designed to bring about significant educational reform in the state. One result of that legislation was the strengthening and extension of a statewide competency testing program to include a high school exit level test in mathematics and English language arts. These tests must be passed in order to receive a high school diploma.

The Texas Educational Assessment of Minimum Skills (TEAMS) assesses minimum competency in the basic skills (reading, writing and mathematics) at grades 1, 3, 5, 7 and 9, as well as at the grade 11-12 exit level. All students at the tested grade levels are required to take these tests except for those special education students who have been exempted by their Admission, Review and Dismissal Committees. Students who are not proficient in the English language must take the TEAMS tests in English. Texas has a very large Hispanic population, as well as many recent immigrants from other countries, who are limited in English proficiency.

The TEAMS tests are criterion-referenced instruments whose stated objectives are tied directly to the state's Essential Elements that form the basic English and mathematics curricula in all Texas public

schools (State Board of Education Rules for Curriculum, GE4 450 01). The TEAMS are power tests; each student is allowed as much time as he needs to complete all test items.

The Texas Administrative Code, adopted by the State Board of Education in February 1985, delineated the requirements of the TEAMS tests. TEAMS mastery levels for each grade are determined by the State Board of Education. Failure to master the tests at the lower grade levels signals a need for remediation; non-mastery does not require retention. Lack of mastery of either part of the exit level test by the end of twelfth grade prevents a student from receiving his high school diploma.

The exit level tests are given to students early in their junior year. If they fail to pass at that time, they are given three more opportunities to do so before the end of their senior year. Remedial instruction must be provided to those students who fail to master either section of the test. Students who have been denied a high school diploma because they failed to pass the TEAMS tests may retake the tests after leaving twelfth grade; they will then receive a diploma if mastery is achieved. The first students who will be affected by the requirement to pass this minimum competency test in order to graduate are those now in the eleventh grade, the class of 1987.

Results of the First TEAMS Exit Level Tests

The exit level of the TEAMS was administered to all eleventh graders in Texas for the first time in October 1985. A total of 191,556 eleventh graders took the tests.

An examination of the results of this first administration prompts consideration of the possibility that many Texas high school students will not receive diplomas because they were unable to pass minimum competency tests.

The State Board of Education set the following mastery levels for the 1985-86 exit level TEAMS tests:

Mathematics - 36 of 72 items answered correctly
English Language Arts - 45 of 72 items answered correctly

These criteria were based on mastery of 70% of the items in 13 of the 18 mathematics objectives and in 16 of the 18 English language arts objectives. This reduction in the required mastery level was adopted for the first TEAMS administrations because validity studies indicated that preparation for certain objectives was not uniformly adequate throughout the state. It is likely that mastery levels will be raised in the future as student preparation becomes more uniform.

Table 1 shows mastery results of the October 1985 administration of the TEAMS exit level examination. The number and percent of students statewide who passed and failed each section of the test are shown.

Table 1

Students Mastering and Not Mastering TEAMS
Exit Level Examination in October 1985

Subtest	Number Tested	Number Mastering	Percent Mastering	Number Not Mastering	Percent Not Mastering
Mathematics	187,360	164,875	88%	22,485	12%
English Language Arts	186,560	169,639	91%	16,921	9%

Eighty-eight percent of the students mastered the mathematics portion of the TEAMS and 91% mastered English language arts. This represents an unexpectedly high proportion of students passing. The Texas Education Agency (July, 1985) had predicted from field test data that only 75% of the state's students would pass the mathematics test and 76% would pass English language arts. The Agency cited "massive instructional remediation efforts which were undertaken by Texas school districts prior to the October testing of grade 11 students" as a possible cause of the higher passing rates (Texas Education Agency, December, 1985).

Though the percent of students not mastering the tests appeared low, 22,485 individuals failed in mathematics and 16,921 failed in English language arts. Failure to master either subtest will result in failure to receive a diploma. While some of these students will pass the tests by the end of the twelfth grade, many of them will not.

Among the students at risk of not receiving a diploma are 11,751 eligible eleventh graders who did not take the October tests. Many of these students did not report for a make-up test in January because, according to informal reports from school personnel, they felt they would fail. Additionally, when mastery levels are raised as all objectives are included in the scoring, a higher percentage of students may fail.

As an example of the possible effect of new scoring standards, researchers in the Houston Independent School District (HISD) calcu-

lated what the mastery rates for their eleventh graders would have been in October 1985 if mastery requirements had been 70% of the total test items rather than 70% of the items on an adjusted number of objectives. It can be seen in Table 2 that the failure rate in mathematics would have jumped from 14% to 39%.

Table 2

HISD October 1985 TEAMS Passing Rates
for Adjusted and Theoretical Mastery Requirements

Passing Score	Mathematics		Language Arts	
	Pass	Fail	Pass	Fail
1985 Adjusted 70%	86%	14%	89%	11%
70% of Total Items	61%	39%	81%	19%

The problem of MCT-related dropouts will be greater in some locations than in others. Differences in passing rates among the eight largest cities in Texas are shown in Table 3.

Table 3

Percent of Eleventh Graders Passing TEAMS
in Eight Largest Texas School Districts, October 1985

City	Mathematics	Language Arts
Austin	92%	94%
Ysleta	91%	93%
El Paso	89%	90%
Houston	86%	89%
Corpus Christi	82%	89%
San Antonio	81%	86%
Fort Worth	78%	86%
Dallas	80%	83%

Demographic data suggest that failure to master the tests and attain diplomas will be more prevalent among some groups than others. Table 4 illustrates these differences by showing the percent of students in various categories who did not master the TEAMS subtests in October 1985.

Table 4

A Demographic Comparison:
Percent of Texas' Eleventh Graders
Not Mastering TEAMS

Demographic Category	% Not Mastering Mathematics	% Not Mastering Language Arts
Male	12%	11%
Female	12%	7%
White	6%	4%
Hispanic	18%	16%
Black	28%	19%
Bilingual Programs	40%	48%
ESL Programs	34%	47%
Chapter I Programs	39%	38%
Gifted and Talented Programs	0	1%

The data on failure rates suggests that the students most affected by the exit level requirement will be bilingual students (48% failing in language arts on their first try) and "disadvantaged" students in Chapter I programs (39% failing mathematics).

Although the overall percent of students failing to master the TEAMS tests may be relatively small, it is likely that a significant number

of Texas students will not receive high school diplomas in 1987 and thereafter as a result of their failure to pass TEAMS. Such students will constitute a new kind of high school dropout in this state, as well as in other states with similar requirements. New types of prevention programs will be needed to minimize the effects of these laws.

Prevention Programs

The problem of keeping potential dropouts in school has faced school personnel for many years. The literature is filled with various strategies designed to meet the needs of students at risk of dropping out and programs to encourage the student who has left school to return and complete high school. Most school districts provide work/study programs, tutorial programs and alternative schools, all in an effort to educate those students who cannot survive in a traditional classroom. These programs have had varying degrees of success. Since it is difficult to isolate those factors that work to keep students in school or those that fail to do so, conclusive evidence is not available on which types of intervention work best for this group.

Programs which appear to have the most success are those where the student receives a great deal of personal attention and is made to feel that he is part of a family. These programs usually have small pupil-teacher ratios, flexible scheduling and rules, and a specialized curriculum (LeCompte, 1985). Such programs deal with emotional and psychological factors as well as academic ones.

Prevention programs for the students who may drop out because of MCT requirements are generally focused on remediation of basic skills. The activities outlined below describe the intervention strategies undertaken by the Houston Independent School District in an effort to prevent a large number of failures on the exit-level test.

Scores on tests previously given to the 1984-1985 tenth graders were used to identify those students who were unlikely to pass the exit-level TEAMS unless they upgraded their skills in reading, writing, and mathematics. High risk students were identified as those who failed one or more subtests on a previously given MCT. Also at risk were students who scored below the 40th percentile on one or more subtests of a nationally standardized achievement test in 1984 and had a grade of C or lower in related courses.

At the time they received their end-of-year report cards, the two groups of tenth graders at risk were given individualized profiles of achievement. They and their parents received information concerning summer school preparation courses, scheduling and registration. Summer school courses were held at six district high schools. The six-week summer session included half-day courses in mathematics, reading and writing. The local community college offered evening courses twice a week.

In addition, high school coaches were asked to encourage their athletes to sign up for summer school. If the student was at risk and

did not take the summer courses, he would have to take his TEAMS preparation courses in the early fall, which might affect his ability to participate in sports.

The district also developed a plan for vocational teachers to be returned to eleven-month contracts in order to assist in the summer program. Teachers were charged with contacting and counseling students in their programs who had been identified as "high risk" and to encourage these students to enroll in a summer school class.

Non-school based preparation components also were developed. Programs to serve 750 area students to prepare for the test were developed in churches and community centers. These programs were computer-assisted and were supported by the district's department of technology.

During the school year a directed effort was made to prepare all students to do well on the TEAMS tests. Parents and students were informed by means of pamphlets, letters and media presentations about the nature and importance of the competency tests. All English and mathematics teachers received copies of the tests' objectives, as well as state-prepared vocabulary and spelling lists, for use in their regular classroom instruction.

In addition, tutorial classes were held both during and outside of the school day for "at risk" students. In the second semester, eleventh grade students who failed the October TEAMS were required to take additional tutorials. Instructional materials that are directly related to the TEAMS objectives were used, as well as diagnostic

tests, practice tests and self-help materials. Volunteer and peer tutoring also took place in some schools. Approximately 60% of eleventh grade students received some kind of special instruction for TEAMS during the fall semester.

These district-wide efforts to prepare students for the TEAMS undoubtedly helped to keep the failure rates low. Studies are currently in progress to identify the effects that the emphasis on remediation may have had.

Conclusion

Students who did not take the TEAMS and those who did not participate in any out-of-school preparation for the test may be from the population of students who were already at risk of dropping out. These students may be uninvolved, unconcerned, and generally lacking in motivation and home encouragement to continue their education. Many of these students are from low socioeconomic groups or are unable to speak English.

There is a second group of students affected by the MCT movement. These are students with a poor academic background who have the willingness to stay in school and graduate, but who will be denied a diploma because they do not meet the minimum standards. These students may become frustrated and quit school or they may remain in school only to receive a certificate of attendance.

Remediation programs for this second type of dropout will continue to intensify. These programs will be more academic than traditional dropout prevention which tends to emphasize emotional and psychological factors.

Because the Texas MCT program begins in first grade and continues every other year until the exit level, it is hoped that students at risk of not graduating will be identified early and steps can be taken to prevent their failure. Beginning early in the school years may prove to have the greatest success with the new dropout as it does in more traditional programs.

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